

WHAT IS CLAIMED IS:

1. A print system in which a printing apparatus prints by using print data which is sent by a printer driver which is made operative by an information  
5 processing apparatus, wherein said printer driver comprises:

information adding means for adding structure information of said print data to said print data which is sent; and

10 information sending means for sending said added structure information to said printing apparatus,

and said printing apparatus executes a printing process of said print data on the basis of said received structure information.

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2. A system according to claim 1, wherein the information obtained by said printer driver during the generation of said print data is set to said structure information.

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3. A system according to claim 1, wherein said printer driver analyzes said print data before said print data is sent to said printing apparatus, and said analyzed information is set to said structure  
25 information.

4. A system according to claim 1, wherein said

printing apparatus analyzes said structure information  
sent by said printer driver, determines the number of  
nozzles which are used in the printing process, and  
executes the printing process by using nozzles of said  
5 determined number of nozzles.

10 5. A system according to claim 4, wherein when  
said structure information is not sent, said printing  
apparatus analyzes said print data and prints.

15 6. A system according to claim 1, wherein said  
structure information includes at least either  
information showing whether the print data which is  
subsequently printed is color data or monochrome data  
or information showing whether said color data and said  
monochrome data are adjacent to each other or not, and  
said printing apparatus prints on the basis of said  
structure information.

20 7. A system according to claim 1, wherein said  
structure information includes at least one of  
information showing on what number line from a present  
position the print data which is subsequently printed  
is generated, information showing from what number line  
25 color data starts, and information showing from what  
number line monochrome data starts, and said printing  
apparatus prints on the basis of said structure

information.

8. A system according to claim 1, wherein said  
structure information is information regarding right  
5 and left edges of the print data which is subsequently  
printed, and said printing apparatus prints on the  
basis of said structure information.

9. A system according to claim 1, wherein said  
10 printer driver can set a designated area of said  
structure information which is added to said print data  
on an arbitrary unit basis.

10. A system according to claim 1, wherein said  
15 information sending means sends said structure  
information to said printing apparatus prior to sending  
said print data, thereby allowing said printing  
apparatus to recognize a structure of the print data  
which is subsequently sent.

11. A system according to claim 10, wherein if  
data of a next page exists during the print of a  
present page, said printer driver notifies said  
printing apparatus of such a fact by said information  
25 sending means.

12. A system according to claim 11, wherein if

the data of the next page exists during the print of  
the present page, said printer driver notifies said  
printing apparatus of a print mode and a data structure  
of the next page as said structure information by said  
5 information sending means.

13. A system according to claim 12, wherein if it  
is possible to confirm that a printing operation which  
is being performed at present can be continuously  
10 executed from said notified contents, said printing  
apparatus subsequently executes a process of the next  
page.

14. A system according to claim 11, wherein if it  
15 is possible to confirm that it is difficult to continue  
the print and an error will occur from said notified  
contents, said printing apparatus causes an error prior  
to printing said page.

20 15. A printing method by which a printing  
apparatus prints by using print data which is sent by a  
printer driver which is made operative by an  
information processing apparatus, comprising the steps  
of:

25 adding structure information of said print data to  
said print data which is sent by said printer driver;  
sending said added structure information to said

printing apparatus; and

executing a printing process of said print data by  
said printing apparatus on the basis of said received  
structure information.

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16. A method according to claim 15, wherein the  
information obtained by said printer driver during the  
generation of said print data is set to said structure  
information.

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17. A method according to claim 15, wherein said  
printer driver analyzes said print data before said  
print data is sent to said printing apparatus, and said  
analyzed information is set to said structure  
information.

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18. A method according to claim 15, wherein said  
printing apparatus analyzes said structure information  
sent by said printer driver, determines the number of  
nozzles which are used in the printing process, and  
executes the printing process by using nozzles of said  
determined number of nozzles.

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19. A method according to claim 18, wherein when  
said structure information is not sent, said printing  
apparatus analyzes said print data and prints.

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20. A method according to claim 15, wherein said structure information includes at least either information showing whether the print data which is subsequently printed is color data or monochrome data or information showing whether said color data and said monochrome data are adjacent to each other or not, and said printing apparatus prints on the basis of said structure information.

21. A method according to claim 15, wherein said structure information includes at least one of information showing on what number line from a present position the print data which is subsequently printed is generated, information showing from what number line color data starts, and information showing from what number line monochrome data starts, and said printing apparatus prints on the basis of said structure information.

22. A method according to claim 15, wherein said structure information is information regarding right and left edges of the print data which is subsequently printed, and said printing apparatus prints on the basis of said structure information.

23. A method according to claim 15, wherein said printer driver can set a designated area of said

structure information which is added to said print data on an arbitrary unit basis.

24. A method according to claim 15, wherein in  
5 said step of sending said structure information, said structure information is sent to said printing apparatus prior to sending said print data, thereby allowing said printing apparatus to recognize a structure of the print data which is subsequently sent.

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25. A method according to claim 24, wherein if  
data of a next page exists during the print of a present page, said printer driver notifies said printing apparatus of such a fact by said information  
15 sending step.

26. A method according to claim 25, wherein if  
the data of the next page exists during the print of the present page, said printer driver notifies said  
20 printing apparatus of a print mode and a data structure of the next page as said structure information by said information sending step.

27. A method according to claim 26, wherein if it  
25 is possible to confirm that a printing operation which is being performed at present can be continuously executed from said notified contents, said printing

apparatus subsequently executes a process of the next page.

28. A method according to claim 25, wherein if it  
5 is possible to confirm that it is difficult to continue  
the print and an error will occur from said notified  
contents, said printing apparatus causes an error prior  
to printing said page.

10 29. An information processing apparatus for  
making a printer driver operative so as to generate  
print data and sending said generated print data to a  
printing apparatus, comprising:

15 information adding means for adding structure  
information of said print data to the print data which  
is sent by said printer driver; and

information sending means for sending said added  
structure information to said printing apparatus,

20 wherein said printing apparatus is allowed to  
execute a printing process of said print data on the  
basis of said sent structure information.

30. A printing apparatus for printing by using  
print data which is sent by a printer driver which is  
25 made operative by an information processing apparatus,  
comprising:

information receiving means for receiving



structure information added to the print data which is sent by said printer driver; and

print processing means for performing a printing process of said print data on the basis of said  
5 received structure information.

31. A printer driver program which is made operative by an information processing apparatus, generates print data, and sends it to a printing  
10 apparatus, comprising:

an information adding step of adding structure information of said print data to said print data which is sent; and

an information sending step of sending said added  
15 structure information to said printing apparatus,

wherein said printing apparatus is allowed to execute a printing process of said print data on the basis of said received structure information.